1001**25**6,040,0667

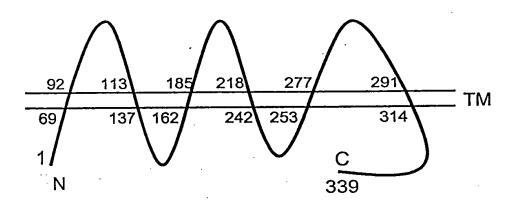
FIG. 1A

(SEQ ID NO:1 ♥AG ACT CAC GGT CAA GCT AAG GCG AAG AGT GGG TGG CTG AAG CCA TAC TAT TTT ATA GAA (SEQ ID NO:2)→ M P R к W E S R K D ITNQ E E L ĸ M TTA ATG GAA AGC AGA AAA GAC ATC ACA AAC CAA GAA GAA CTT TGG AAA ATG AAG CCT AGG 61 E T S М L K מ . Y L н к n T G E D N L E AGA AAT TTA GAA GAA GAC GAT TAT TTG CAT AAG GAC ACG GGA GAG ACC AGC ATG CTA AAA 121 S D E F D Н Q T A А L H L v AGA CCT GTG CTT TTG CAT TTG CAC CAA ACA GCC CAT GCT GAT GAA TTT GAC TGC CCT TCA 181 н L P T ĸ I н T 0 E L F P Q T. O GAA CTT CAG CAC ACA CAG GAA CTC TTT CCA CAG TGG CAC TTG CCA ATT AAA ATA GCT GCT 241 ν I H P L A T L L R E т F S L L ATT ATA GCA TCT CTG ACT TTT CTT TAC ACT CTT CTG AGG GAA GTA ATT CAC CCT TTA GCA 301 v N__K V I L P F Y K I P I L T S H O Q Y ACT TCC CAT CAA CAA TAT TTT TAT AAA ATT CCA ATC CTG GTC ATC AAC AAA GTC TTG CCA 361 Ø v I A Λ I L P T T. T. A L ATG GTT TCC ATC ACT CTC TTG GCA TTG GTT TAC CTG CCA GGT GTG ATA GCA GCA ATT GTC 421 W M L W L D K Y K K F P н H N G T ĸ CAA CTT CAT AAT GGA ACC AAG TAT AAG AAG TTT CCA CAT TGG TTG GAT AAG TGG ATG TTA 481 I v L H A F F A P Q F G L L S ACA AGA AAG CAG TTT GGG CTT CTC AGT TTC TTT TTT GCT GTA CTG CAT GCA ATT TAT 541 Y K L L N w A Y s Y R М P R R CTG TCT TAC CCA ATG AGG CGA TCC TAC AGA TAC AAG TTG CTA AAC TGG GCA TAT CAA CAG 601 E ν W R M T AWIEHD N K Е n GTC CAA CAA AAT AAA GAA GAT GCC TGG ATT GAG CAT GAT GTT TGG AGA ATG GAG ATT TAT 661 A V T A L a v a L A GTG GGA TTG GCA ATA CTG GCT CTG TTG GCT GTG ACA TCT ATT CCA GTG TCT CTG GGA ATT 721 s · K W R E F H Y I Q L T S D S TCT GTG AGT GAC TCT TTG ACA TGG AGA GAA TTT CAC TAT ATT CAG AGC AAG CTA GGA ATT 781 K W I D I F A W N H A L T r G GTT TCC CTT CTA CTG GGC ACA ATA CAC GCA TTG ATT TTT GCC TGG AAT AAG TGG ATA GAT 841 v F L TPPTF M I A F v W Y I 0 TTC CTT CCA ATT ATA AAA CAA TTT GTA TGG TAT ACA CCT CCA ACT TTT ATG ATA GCT GTT 901 I L K R ĸ к F L P C L S I L F ĸ GTT GTC CTG ATA TTT AAA AGC ATA CTA TTC CTG CCA TGC TTG AGG AAG AAG ATA CTG AAG 961 С S T E I EDVTKIN K Н G W ATT AGA CAT GGT TGG GAA GAC GTC ACC AAA ATT AAC AAA ACT GAG ATA TGT TCC CAG TTG 1021 TAG AAT TAC TGT TTA CAC ACA TTT TTG TTC AAT ATT GAT ATA TTT TAT CAC CAA CAT TTC 1081 1141

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FIG. 1B

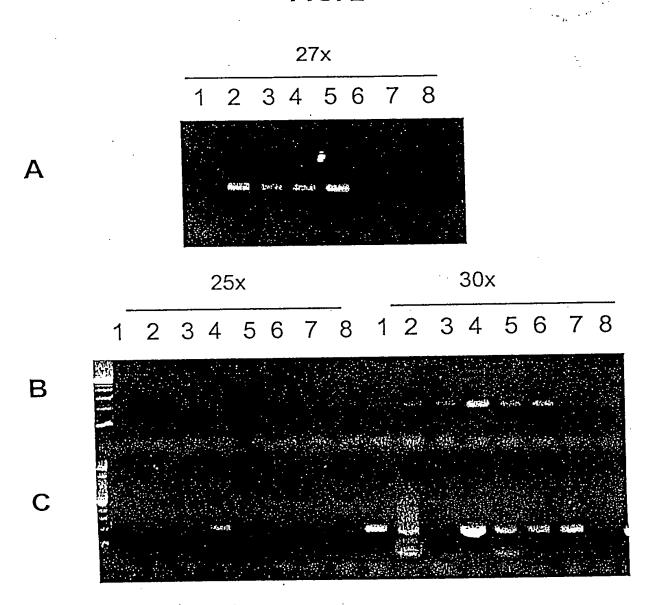
Extracellular



Intracellular

FIG. 1C

FIG. 2



Panels:

Α

- 1. Brain
- 2. Prostate
- 3. LAPC-4 AD
- 4. LAPC-4 Al
- 5. LAPC-9 AD
 - 6. HeLa
 - 7. Murine cDNA
 - 8. Neg. control

В

- 1. Brain
- 2. Heart
- 3. Kidney
- 4. Liver
- 5. Lung
- 6. Pancreas
- 7. Placenta
- 8. Skeletal Muscle

- 1. Colon
- 2. Ovary
- 3. Leukocytes
- 4. Prostate
- 5. Small Intestine
- 6. Spleen
- 7. Testis
- 8. Thymus

FIG. 3A

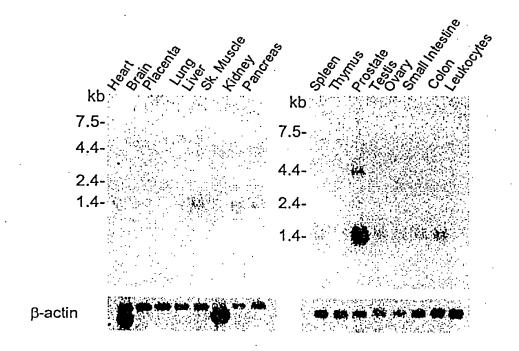
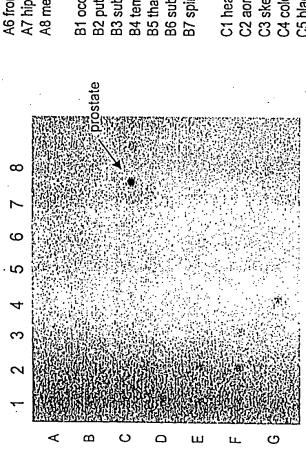


FIG. 3B



A1 brain	D1 testis
A2 amygdala	D2 ovary
A3 caudate nucleus	D3 pancreas
A4 cerebellum	D4 pituitary gland
A5 cerebral cortex	D5 adrenal gland
A6 frontal lobe	D6 thyroid gland
A7 hippocampus	D7 salivary gland
A8 medulla oblongata	D8 mammary glar

E1 kidney E2 liver	E3 small intestine	E4 spleen	E5 thymus	E6 peripheral leukocytes	E7 lymph node	
B1 occipital lobe B2 putamen	B3 substantia nigra	B4 temporal lobe	B5 thalamus	B6 sub-thalamic nucleus	B7 spinal cord	

	F1 appendix	F2 lung	F3 trachea	F4 placenta
C1 heart	C2 aorta	C3 skeletal muscle	C4 colon	C5 bladder

F4 placenta	G1 fetal brain	G2 fetal heart	G3 fetal kidney	
C5 bladder C6 uterus	C7 prostate	C8 stomach		

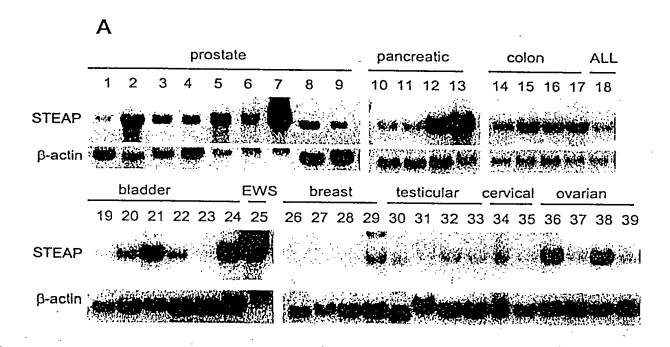
FIG. 4-1

ATACTATTTTATAGAATTAATGGAAAGCAGAAAAGACATCACAAACCAAGAAGAACTTTGGAAAATGAAGCCTAGG AGAAATTTAGAAGAAGACGATTATTTGCATAAGGACACGGGAGAGACCAGCATGCTAAAAAAGACCTGTGCTTTTGC GTGGCACTTGCCAATTAAAATAGCTGCTAYTATAGCATCTCTGACTTTTCTTTACACTCTTCTGAGGGAAGTAATT CACCCCTTAGCAACTTCCCATCAACAATATTTTTATAAAATTCCAATCCTGGTCATCAACAAAGTCTTGCCAATGG TTTCCATCACTCTCTTGGCATTGGTTTACCTGCCAGGTGTGATAGCAGCAATTGTCCAACTTCATAATGGAACCAA GTATAAGAAGTTTCCACATTGGTTGGATAAGTGGATGTTAACAAGAAAGCAGTTTGGGCTTCTCAGTTTCTTTTTT GCTGTACTGCATGCAATTTATAGTCTGTCTTACCCAATGAGGCGATCCTACAGATACAAGTTGCTAAACTGGGCAT ATCAACAGGTCCAACAAAATAAAGAAGATGCCTGGATTGAGCATGATGTTTGGAGAATGGAGATTTATGTGTCTCT AGAGAATTTCACTATATTCAGGTAAATAATATAAAAATAACCCTAAGAGGTAAATCTTCTTTTTGTGTTTATGAT ATAGAATATGTTGACTTTACCCCATAAAAAATAACAAATGTTTTTCAACAGCAAAGATCTTATACTTGTTCCAATT CTCTGTTGCCCATGCTGGAGTACAGTGGCACGATCTCGGCTCACTGCAACCTGCGCCTCCTGGGTTCAGGCGATTC TCTTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACCCATCACCATGTCCAGCTAATTTTTGTATTTTTAGTA GAGACAGGGTTTTCCCATGTTGGCCAGGCTGGTCTCGATCTCCTGACCTCAAATGATCCGCCCACCTCGGCCTCCC AAAGTGCTGGGATGACAGTTGTGAGCCACCACACTCAGCCTGCTCTTTCTAATATTTGAAACTTGTTAGACAATTT TGTCACCTGAATTTAGTAATGCCTTTTATGTTACACAACTTAGCACTTTCCAGAAACAAAAACTCTCCCTTGAAA TAATAGAGTTTTTATCTACCAAAGATATGCTAGTGTCTCATTTCAAAGGCTGCTTTTTCCAGCTTACATTTTATAT ACTTACTCACTTGAAGTTTCTAAATATTCTTGTAATTTTAAAACTATCTCAGATTTACTGAGGTTTATCTTCTGGT GGTAGATTATCCATAAGAAGAGTGATGTGCCAGAATCACTCTGGGATCCTTGTCTGACAAGATTCAAAGGACTAAA

FIG. 4-2

TTTAATTCAGTCATGAACACTGCCAATTACCGTTTATGGGTAGACATCTTTGGAAATTTCCACAAGGTCAGACATT CGCAACTATCCCTTCTACATGTCCACACGTATACTCCAACACTTTATTAGGCATCTGATTAGTTTGGAAAGTATGC CTCCATCTGAATTAGTCCAGTGTGGCTTAGAGTTGGTACAACATTCTCACAGAATTTCCTAATTTTGTAGGTTCAG CCTGATAACCACTGGAGTTCTTTGGTCCTCATTAAATAGCTTTCTTCACACATTGCTCTGCCTGTTACACATATGA TGAACACTGCTTTTTAGACTTCATTAGGAATTTAGGACTGCATCTTGACAACTGAGCCTATTCTACTATATGTACA ATACCTAGCCCATAATAGGTATACAATACACATTTGGTAAAACTAATTTTCAACCAATGACATGTATTTTTCAACT **AGTAACCTAGAAATGTTTCACTTAAAATCTGAGAACTGGTTACACTACAAGTTACCTTGGAGATTCATATATGAAA** ACGCAAACTTAGCTATTTGATTGTATTCACTGGGACTTAAGAATGCGCCTGAATAATTGTGAGTTCGATTTGTTCT GGCAGGCTAATGACCATTTCCAGTAAAGTGAATAGAGGTCAGAAGTCGTATAAAAGAGGTGTTGTCAGAACACCGT TGAGATTACATAGGTGAACAACTATTTTTAAGCAACTTTATTTGTGTAGTGACAAAGCATCCCAATGCAGGCTGAA ATGTTTCATCACATCTCTGGATCTCTCTATTTTGTGCAGACATTGAAAAAATTGTTCATATTATTTCCATGTTATC CATTAGTCGCCTTCACAACTGATAAAGATCACTGAAGTCAAATTGATTTTTGCTATAATCTTCAATCTACCTATAT TTCACTTAGACAGCTTGGAGACAAGAAATTACCCAAAAGTAAGGTGAGGAGGATAGGCAAAAAAGAGCAGAAAGATG TGAATGGACATTGTTGAGAAATGTGATAGGAAAACAATCATAGATAAAGGATTTCCAAGCAACAGAGCATATCCAG ATGAGGTAGGATGGGATAAACTCTTATTGAACCAATCTTCACCAATTTTGTTTT<u>TCTTTTGCAGA</u>GCAAGCTAGGA CCTGCCATGCTTGAGGAAGAAGATACTGAAGATTAGACATGGTTGGGAAGACGTCACCAAAATTAACAAAACTGAG ATATGTTCCCAGTTGTAGAATTACTGTTTACACACATTTTTGTTCAATATTGATATATTTTATCACCAACATTTCA

FIG. 5



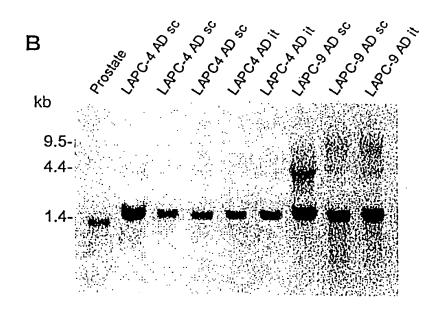


FIG. 6

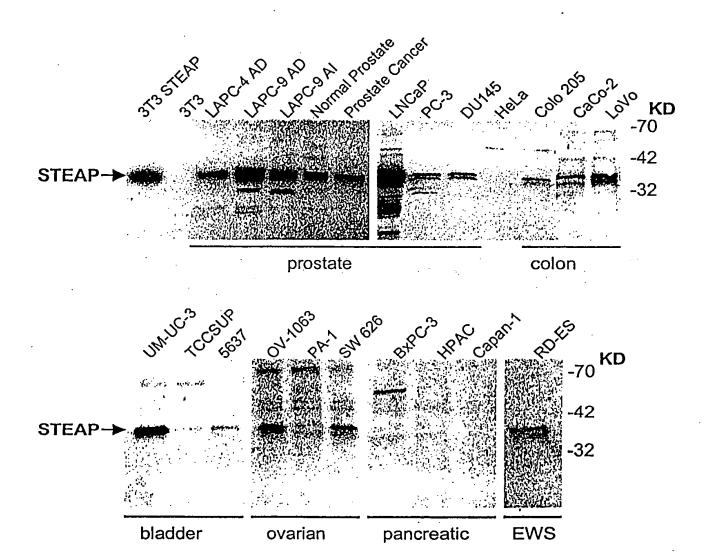
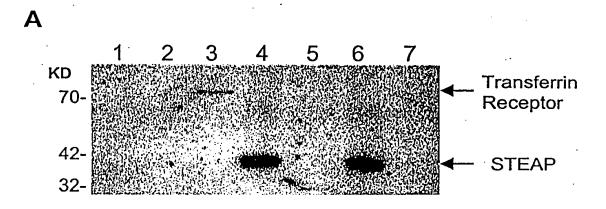


FIG. 7



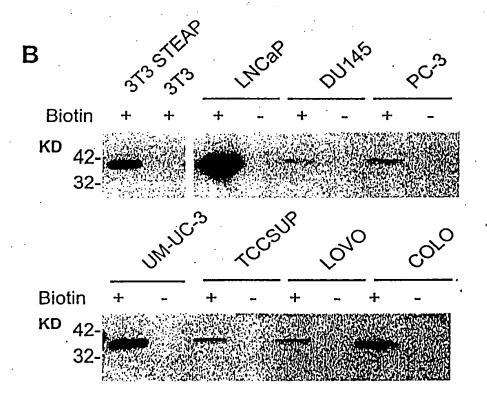


FIG. 9

			•															
5'	GAC	TTT	10 TAC		ATT	19 CCT	АТА	GAG	28 ATT	GTG	ΤΛΑ	37 AAA	ACC	ATT	46 CCT	АТА	GTT	55 GCC
	Asp	 Phe	 Tyr 64	Lys	Ile	 Pro 73		Glu			Asn		Thr	 Leu	 Pro 100	Ile	Val	Ala 109
	ATT	ACT		СТС	тсс	CTA							CTG	GCA		GCT	TAT	
	Ile	Thr	Leu '118	Leu	Ser	Leu 127	Val	Tyr		Ala				Ala	Ala 154		Tyr	Gln 163
	CTT	TAT		GGC	ACC	AAG	TAT	AGG						TTG	GAA	ACC	TGG	TTA
			172			Lys 181			190			199			208			217
	CAG	TGT	AGA	AAA	CAG	CTT	GGA								ATG	GTC	CAT	GTT
			226			Leu 235	Gly	Leu	Leu 244	Ser	Phe	Phe 253	Phe	Ala	262			271
	GCC	TAC	AGC	CTC	TGC	TTA	CCG	ATG	AGA	AGG	TCA	GAG	AGA	TAT	TTG	TTT	CTC	AAC
			280			Leu 289			298	•		307			316			325
	ATG	GCT	TAT	CAG	CAG	GTT	CAT	GCA	AAT	ATT	GAA	AAC	TCT	TGG	AAT	GAG	GAA	GAA
			334			Val 343			352			361			370			379
	GTT	TGG	AGA ⁻	ATT	GAA	ATG	TAT	ATC	TCC	TTT	GGC	ATA	ATG	AGC	CTT	GGC	TTA	CTT
		•	388			Met 397			406	•		415			424			433
	TCC	CTC	CTG	GCA	GTC	ACT	TCT	ATC	CCT	TCA	GTG	AGC	AAT	GCT	TTA	AAC	TGG	AGA.
			442			Thr 451			460			469			478			487
	GAA	TTC	AGT	TTT	ATT	CAG	TCT	ACA	CTT	GGA	TAT	GTC	GCT	CTG	CTC	ATA	AGT	ACT
			496			Gln 505			514							Ile	Ser	Thr
						TAT									•			
	Phe	His	Val	Leu	Ile	Tyr	Gly	Trp	Lys	Arg	Ala	(SEQ	ID NO	:8)			٠	

FIG. 10

STEAP-2, AA508880 (NCI_CGAP Pr6)

STEAP-2, 98P4B6 SSH fragment

TTTGCAGCTTTGCAGATACCCAGACTGAGCTGGAACTGGAATTTGTCTTCCTATTGACTCTACTTCTTTAAAAGCG GCTGCCCATTACATTCCTCAGCTGTCCTTGCAGTTAGGTGTACATGTGACTGAGTGTTGGCCAGTGAGATGAAGTC TCCTCAAAGGAAGGCAGCATGTGTCCTTTTT (SEQ ID NO:10)

AI139607 (testis EST)

R80991 (placental EST)

ggccgcggcanccgctacgacctggtcaacctggcagtcaagcaggtcttggccanacaagagccacctctgggtg aaggaggagtctggcggatggagatctacctctccctgggagtgctggccctcggcacgttgtccctgctggccg tgacctcactgccgtccattgcaaactcgctcaactggaggagttcagcttcgttcattcctactgggctttgt ggccntcgtgctgagcacactncacacgctcacctacggctggacccgcgccttcgaggagagccgctacaagttc tacctncctcccaccttcacgntcacgctgctggtgccctgcgttcatcctgggccaaagccctgtttntac tgccttgcattcagccgnaga (SEQ ID NO:12)

FIG. 11A

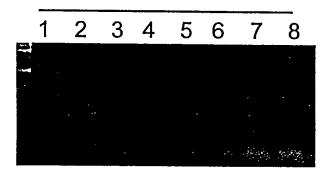
STEAP-1	106	FYKIPII	VINK	VLPM	VSIT	LLAL	VYL	PGV:	IAAI'	VQLH	NGTKY	KKFP.	HWLD	KWMI	TRE	QFG
STEAP-2	2	FYKIPIE	IVNK	TLPI	VAIT	LLSL	VYL	AGL	LAAA	YQLY	YGTKY	RRFP	PWLE	TWL)CRK	(QLG
		*****	**	**	* **	** *	***	*	**	**	****	**	**	*	* *	* *
STEAP-1	166	LLSFFFA	VLHA	IYSL	SYPM	RRSY	RYKI	LLN	OYAN	OVOO	NKEDA	WIEH	DVWR	MEI	VSI	GIV
STEAP-2	62	LLSFFFA	MVHV	AYSL	CLPM	RRSE	RYLI	FLN	MAYO	AHVC	NIENS	WNEE:	EVWR	IEM	(ISF	GIM
		*****	*	***	**	***	**	**	***		# # tion of S		*** NO:	2)	*	**
STEAP-1	226	GLAILAL	LAVT	SIPS	VSDS:	LTWR	EFH	/IQS	KLG:	IVSL	LLGTI	HALI	FAWN	ĸĸ		
STEAP-2	122	SLGLLSL	LAVT	SIPS	VSNA	LNWR	EFS	FIQS	STLG	YVAL	LISTF:	HVLI	YGWK	R		
		* * *	***	***	* *	* **	**	***	* * *	* *	* *	* **	*	↑		
										(Por	rtion of	SEO II	D NO:	·8\		

FIG, 11B

0000	180 76 0	270 166 68 82	·
1 15 16 30 31 45 46 60 61 75 76 90 -1 MESRKDITNQEE:WR MKPRENLEEDDYLHK DIGETSMLKRPVLLH LHQTAHADEFDCPSE LQHTQELFPQWHLPI KIAAIIASLTPLYTL -2	91 105 106 120 121 135 136 150 151 165 166 180 -1 LREVIHPLATSEQOY FYKIPIHVINKVERM VSITELLALVYZEGOT AAIVOLHNGTKYKKG BHWLDKAMLTRKOFG LLSFFFAVLHALKSE -2	181 195 196 210 211 225 226 240 241 255 256 270 -1 SYPMERSYRYKLEAM AYQOVQONKEDAMIE HDVMRMEIYVSLGIV GLAILAULAVTSIPS VSDSLTWREEHYTIQS KLGIVSLLILGTIHAL -2 CLPMERSERYLEEMM AYQOVHANIENSWAE ESVAMISPETATISPETA SLGILSLILAVTSIPS VSNAVNWREERENGEVOS KLGYLTLIILGTAHTI -3	271 285 286 300 301 315 316 330 331 345 346 360 -1 IFANKKIDIKQEVA YTPPTEKIAVFLETV VLJEKSILFUPCIRK KILKIRHGMEDVTKI NKTEICSQL 339 (SEQ ID NO:2) -2 IYGMKRA
STEAP-1 STEAP-2 STEAP-3 STEAP-4	STEAP-1 STEAP-2 STEAP-3 STEAP-4	STEAP-1 STEAP-2 STEAP-3 STEAP-4	STEAP-1 STEAP-2 STEAP-3 STEAP-4

FIG. 14A

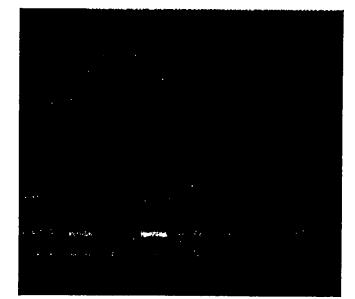
26x



- 1. Brain
- 2. Prostate
- 3. LAPC-4 AD
- 4. LAPC-4 AI
- 5. LAPC-9 AD
- 6. HeLa
- 7. Murine cDNA
- 8. Neg control

FIG. 14B

1 2 3 4 5 6 7 8

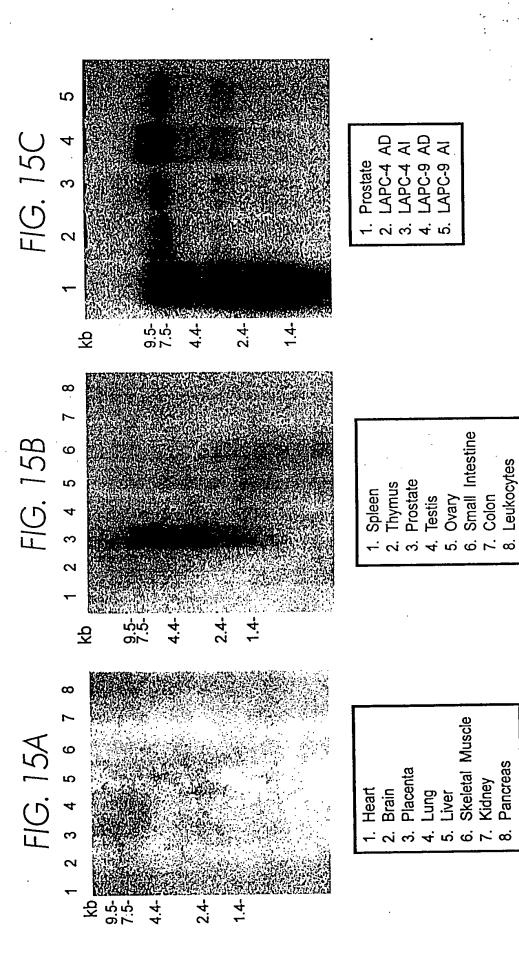


- 1. Colon
- 2. Ovary
- 3. Leukocytes
- 4. Prostate
- 5. Small Intestine
- 6. Spleen
- 7. Testis
- 8. Thymus

30x

25x

Pancreas



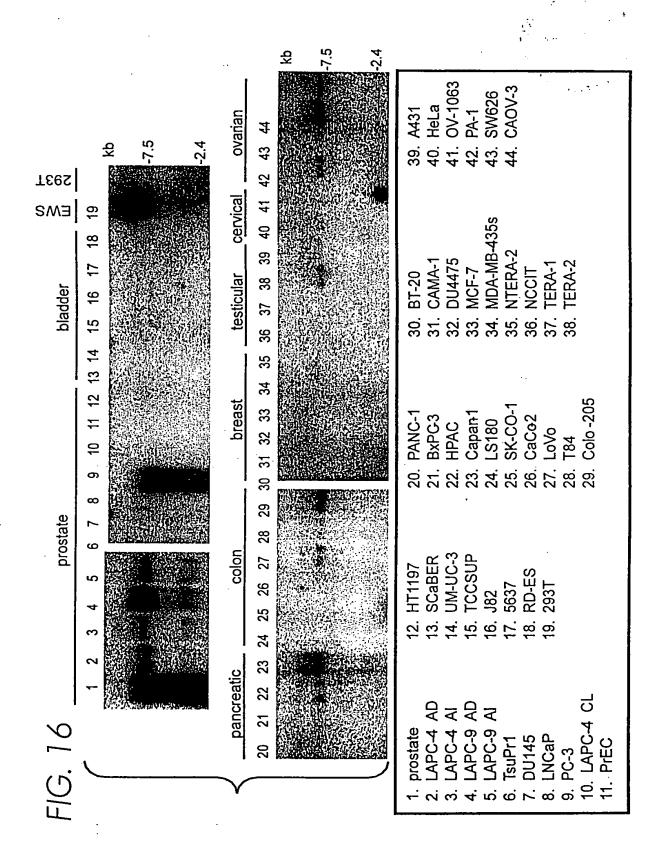


FIG. 17

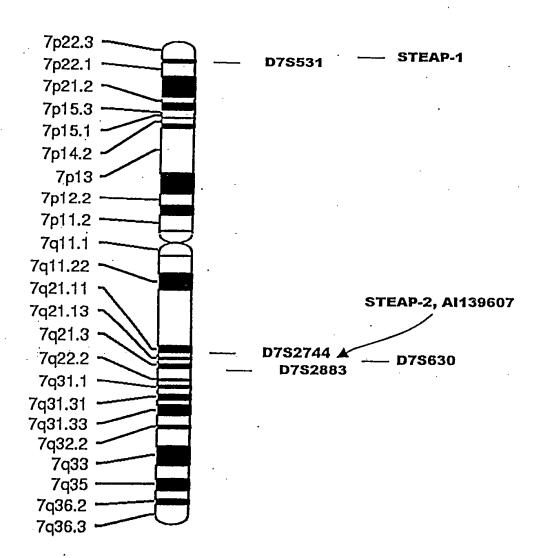
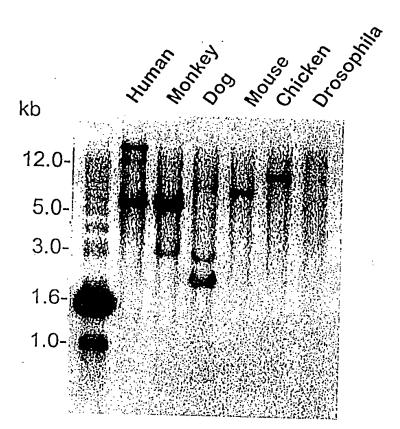
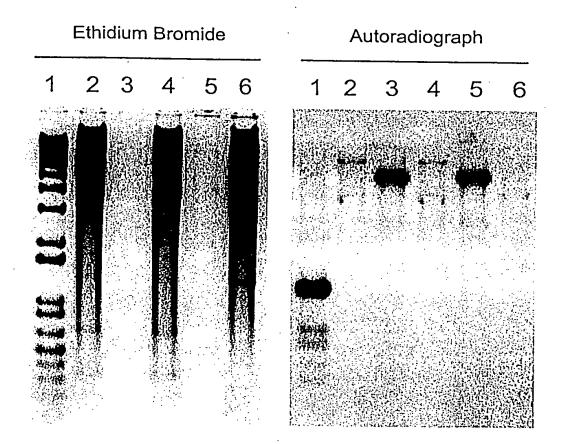


FIG. 19







Lanes

- 1) 1kb ladder
- 2) human female genomic
- 3) 12P11 BAC mus
- 4) human female genomic
- 5) 12P11 BAC mus
- 6) 3T3